Claims

[c1] What is claimed is:

1. A retrofitable power monitoring system comprising:

an enclosure;

at least one current transformer within said enclosure;

a meter connected to said current transformer;

a communications device connected to said meter; and

a server connected to said communications device.

[c2] 2 The retrofitable power monitoring system of claim 1 wherein said meter stores information related to electrical usage.

[c3] 3. The retrofitable power monitoring system of claim 2 wherein said communications device periodically sends said electrical usage information from said meter to said server.

4. The retrofitable power monitoring system of claim 1 further comprising a software module coupled to said server.

5. The retrofitable power monitoring system of claim 4 wherein said software module includes a database object, said database including electrical usage information; an analysis object coupled to said database for analyzing said electrical usage information; and, a reporting object coupled to said database object and said analysis object.

6. The retrofitable power monitoring system of claim 5 wherein said reporting object provides a plurality of predefined or user-defined reports.

7. The retrofitable power monitoring system of claim 6 wherein said plurality of reports includes a repolit from a group consisting of demand graph, demand statistics, or bill verification.

8. The retrofitable power monitoring system of claim 7 further comprising a monitor connected to said server, said reporting object displaying said plurality of reports on said monitor.

[c4]

[c5]

[c6]

[c7]

[c8]

[c10]

[c11]

[c13]

[c14]

- [c9] 9. The retrofitable power monitoring system of claim 6 further comprising a comparator object coupled to said database object, said comparator object periodically comparing said electrical usage information and a predefined electrical rate profile.
 - 10. The retrofitable power monitoring system of claim 9 wherein said comparator object determines a maximum electrical cost period.
 - 11. The retrofitable power monitoring system of claim 10 wherein said reporting object is coupled to said comparator object, said reporting objecting providing a report showing said maximum electrical cost period and said minimum electrical cost period.
- [c12] 12. The retrofitable power monitoring system of claim 11 wherein said reporting object provides an recommended electrical usage profile that reduces the cost associated with the maximum electrical cost period.
 - a plurality of electrical usage monitoring devices, each of said plurality of monitoring devices collecting information related to electric usage in a discreet location; a server connected to communicate with said plurality of monitoring devices; a database object coupled to said server, said database object storing said electrical usage information received from said plurality of monitoring devices; an analysis object coupled to said database for analyzing said electrical usage information; and, a reporting object coupled to said database object and said analysis object.
 - 14. The retrofitable power monitoring system of claim 13 further comprising a comparator object coupled to said database object, said comparator object periodically comparing said electrical usage information of each of said

plurality of monitoring devices and an electrical rate profile.

- [c15] 15. The retrofitable power monitoring system of claim 14 wherein said comparator object determines a maximum electrical cost period for each of said plurality of monitoring devices.
- [c16] 16. The retrofitable power monitoring system of claim 15 wherein said comparator object determines a minimum electrical cost period for each of said plurality of monitoring devices.
- [c17] 17. The retrofitable power monitoring system of claim 16 wherein said reporting object is coupled to said comparator object, said reporting object providing a report showing said maximum electrical cost period and said minimum electrical cost period for each of said plurality of monitoring devices.
- [c18] 18. The retrofitable power monitoring system of claim 16 wherein said reporting object provides a recommended electrical usage profile that reduces the cost associated with the maximum electrical cost period for at least one of said plurality of monitoring devices.
- [c19] 19. The retrofitable power monitoring system of claim 13 wherein said reporting object provides a plurality of predefined reports.
- [c20] 20. The retrofitable power monitoring system of claim 19 wherein said plurality of reports includes a report from a group consisting of demand statistics, demand statistics, or bill verification.
- [c21] 21. The retrofitable power monitoring system of claim 19 further comprising a monitor connected to said server, said reporting object displaying said plurality of reports on said monitor.
- [c22] 22. A retrofitable system for monitoring electrical usage comprising:

 a current sensor;

 a meter coupled to said current sensor, said current sensor providing a signal to said meter indicative of said current;

[c23]

[c24]

[c25]

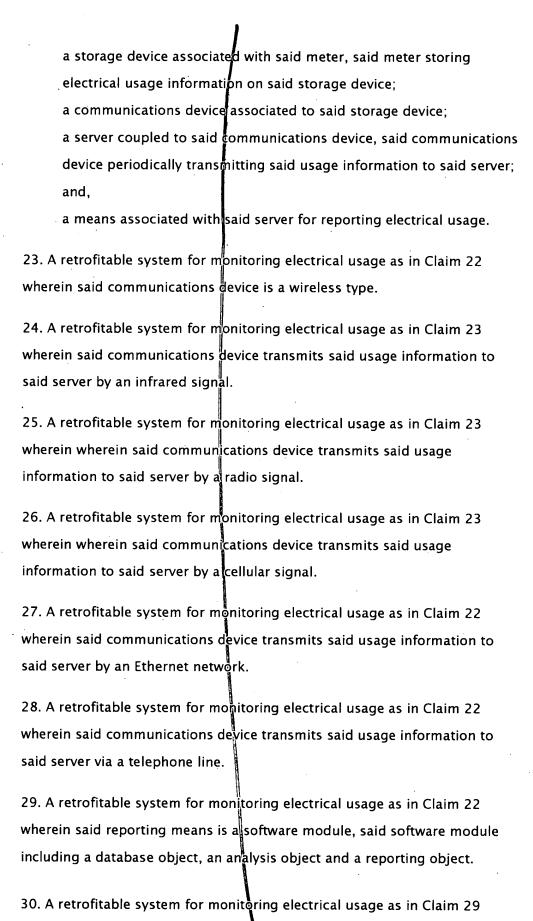
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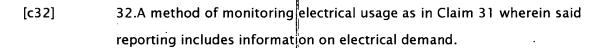
[c29]

[c30]





[c31] 31. A method for monitoring electrical usage comprising:
sensing an electrical current;
receiving a signal indicative of the electrical current;
calculating electrical usage information associated with said received signal;
storing the electrical usage information;
transmitting the electrical usage information to a server;
analyzing the electrical usage information; and,
reporting electrical usage parameters.



- [c33] 33.A method of monitoring electrical usage as in Claim 31 further comprising the step of comparing said electrical usage against a predetermined electrical rate profile.
- [c34] 34. A method of monitoring electrical usage as in Claim 33 further comprising the step of creating an electrical cost profile.
- [c35] 35.A method of monitoring electrical usage as in Claim 34 further comprising the step of analyzing the electrical cost profile.
- [c36] 36.A method of monitoring electrical usage as in Claim 35 further comprising the step of determining a recommended electrical usage profile that minimizes the electrical cost profile.